

## METHOD AND APPARATUS FOR ANALYSIS OF DIGITAL VIDEO IMAGES

### ABSTRACT OF THE DISCLOSURE

A multi-format display device for video production and testing presents a video signal in three or more distinct ways at different areas of a display, to facilitate analysis of video data for discrete areas within the video picture. A video processor produces a complete picture from the input signal on a limited part of the device display area, such as a quadrant of a digitally controlled standard display. At another limited part, preferably on the same display, a picture zoom is presented, showing a visual enlargement of a subpart of the picture around a cursor position, preferably large enough to point out individual pixels or data samples. A third part of the display presents a tabular form of specific pixel numeric data for one or more pixels at the cursor, and also produces a color swatch corresponding to the pixel data values. Graphic plots of picture data, audio and other associated information can be placed in remaining areas. The controller and video processor are operable to accept pixel selection criteria, to identify pixels in the display that meet the criteria, and to scrutinize the selected pixels in sequence, subject to manual selection override.